

International Bureau



(43) International Publication Date
1 August 2002 (01.08.2002)

PCT

(10) International Publication Number
WO 02/059116 A2

(51) International Patent Classification⁷: C07D 413/12,
498/04, 413/10, 413/04, A61K 31/4709, A61P 31/04

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(21) International Application Number: PCT/US01/44731

(22) International Filing Date:
29 November 2001 (29.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/257,904 21 December 2000 (21.12.2000) US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ANTIMICROBIAL QUINOLONE DERIVATIVES AND USE OF THE SAME TO TREAT BACTERIAL INFECTIONS

(57) Abstract: Substituted quinolone derivatives in which an oxazolidinone, isoxazolinone, or isoxazoline is covalently bonded to a quinolone, methods of using the quinolone derivatives, and pharmaceutical compositions containing the quinolone derivatives are disclosed. Methods of synthesizing these substituted quinolone derivatives are also disclosed, and in particular a method of manufacturing a 7-(2-oxo-1,3-oxazolidin-3-yl)aryl-3-quinolinecarboxylic acid by condensing a 4-(2-oxo-1,3-oxazolidin-5-yl)aryl boronic acid with a 7-halo-quinolone derivative. The quinolone derivatives possess antibacterial activity, and are effective against a number of human and veterinary pathogens in the treatment of bacterial diseases.



WO 02/059116 A2